

## **ACC Statement: EPA Aging Initiative Listening Sessions**

The American Chemistry Council (ACC) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make all people's lives better, healthier and safer, including the elderly. ACC is committed to improved environmental, health and safety performance through Responsible Care® (the chemical industry's initiative to communicate with neighbors, and protect the environment, our employees and communities). The chemical industry has a vested interest in preserving the integrity of programs and initiatives that truly benefit senior citizens.

The business of chemistry is a \$450 billion enterprise and a key element of the nation's economic health and strength. The business of chemistry has helped develop over 70,000 products that enable rising U.S. productivity and living standards. The application of chemistry extends to such diverse product areas as consumer electronics, medicines, food, housing, transportation, and telecommunications. Members of the aging population have benefited greatly from the diverse products of chemistry.

Here are a few important facts to keep in mind. People are living longer and healthier lives, due at least in part to the advancements provided by the chemical industry. During the early portions of the past century, life expectancy increased dramatically as a result of reductions in infant mortality. Great reductions in mortality from infectious diseases through chlorination of drinking water was one of the most remarkable public health

achievements during that time period. However, in more recent decades technological advances facilitated by the science of chemistry have increased life expectancy primarily through improved longevity of older Americans.

Secondly, since the creation of the EPA in 1970 and associated voluntary efforts of the chemical industry, the concentrations of many chemicals such as lead, mercury, PCBs, and pesticides have steadily declined in the environment. Moreover, the continued oversight of federal legislation and regulations and commitment of the chemical industry to Responsible Care provide confidence that these environmental and human health gains will be continued. Recent advances in analytical chemistry techniques now permit detection of very low levels of chemicals present in the environment and our bodies. As emphasized the US Centers for Disease Control, it is important to note that the mere presence of trace levels of chemicals in our bodies does not imply an adverse impact on health. However, these analytical technologies and monitoring programs will provide valuable ongoing information assuring that future environmental exposure trends can be effectively evaluated and responded to.

Thirdly, long-standing risk assessment and standard testing approaches are designed to provide information that can conservatively protect aging individuals.

Current risk assessment practices include a 10-fold safety factor for inter-species differences and an additional 10-fold safety factor for inter-individual differences in sensitivities such as young versus old. In addition, for many chemicals, commonly used

animal tests such as chronic toxicity and carcinogenicity studies entail exposures throughout the lifetime, from very young to very old life stages.

In order for EPA to set priorities that will ensure continued advances in length and quality of life for everyone, it will be necessary to focus resources on areas that address the real needs of the elderly and the true environmental hazards that may impact them. According to the Merck Institute of Aging & Health and The Gerontological Society of America "...seventy percent of the physical decline that occurs with aging is related to modifiable factors including smoking, poor nutrition, lack of physical activity, and injuries from falls". Older Americans are not meeting six of the ten targets established by Healthy People 2000 (physical exercise, nutrition, weight, pneumonia vaccinations, and injuries and deaths due to falls). Emphasis should therefore be given to the environmental issues related to these factors, rather than on hypothetical risk issues that are being adequately addressed under other EPA programs and regulations. For example, EPA should support smoking cessation assistance and indoor air quality programs. ACC therefore recommends that EPA apply government resources to well-documented problems like these, since they have real potential to improve longevity, quality of life, and the health and well being of our senior citizens.

## References

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2. Rodu B and Cole P. (2001). The fifty-year decline of cancer in America. *J Clin Oncol*, 19:239-41.
3. Arias, E (2002) United States Life Tables, 2000. *National Vital Statistics Reports*, Centers for Disease Control. 51, 3.